DOCKET NO.: **03-0005 **PATENT**

Application No.: 10/500,854 **Office Action Dated:** June 11, 2009

REMARKS

Claims 1-55 are pending in the present application. The Office has rejected claims 1, 17, 33, 38, 43, 48, and 55 under 35 USC Section 112 as allegedly being indefinite. The Office has rejected claims 1-7, 15-23, 31-48, 51 and 55 under Section 103 as allegedly being unpatentable over USP No. 5,101,437 to Plamondon ("Plamondon") in view of USP Pub. No. 2006/0050962 A1 to Geiger et al. ("Geiger") in further view of USP No. 6,157,731 to Hu et al. ("Hu"). The Office has rejected claims 8-11, 24-27, and 52-54 under Section 103 as allegedly being unpatentable over Plamondon in view of Geiger in view of Hu in further view of USP No. 4,805,222 to Young et al. ("Young"). The Office has rejected claims 12 and 28 under Section 103 as allegedly being unpatentable over Plamondon in view of Geiger in view of Hu in further view of USP No. 5,680,470 to Moussa et al. ("Moussa"). The Office has rejected claims 13, 14, 29, 30, 49 and 50 under Section 103 as allegedly being unpatentable over Plamondon in view of Geiger in view of Hu in further view of USP No. 5,042,073 to Collot et al. ("Collot").

CLAIM REJECTIONS UNDER SECTION 112

The Office has rejected claims 1, 17, 33, 38, 43, 48 and 55 under § 112 as allegedly being indefinite. The crux of the rejection is the use of the recitation, "normalizing an arc length of the signature trace to 1". The Office has erred in concluding that the term is indefinite and unclear. It should be noted that the term is clear and is used in a manner commensurate with commonly used mathematical calculations. For example, in an online text provided by the Temple University, the following is stated in the first paragraph:

"We normalize the length of curve C so that its total length is one, i.e., $arclength(C(p_n)) = 1$."

(http://knight.cis.temple.edu/~shape/shape/tangent_space.html)

As recited in the claims, the signature trace has an arc length, the arc length being normalized to 1. The Applicants request reconsideration and withdrawal of the rejection to claims 1, 17, 33, 38, 43, and 55 under § 112.

REJECTIONS UNDER SECTION 103

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<u>Independent claim 1</u>

Claim 1 has been amended, in part, as follows:

normalization means for normalizing the signature trace to generate a plurality of temporally equidistant points on the signature trace by normalizing the signature trace to an arc length of the signature trace to 1 and the total time to produce the signature to 1;

Claim 1 has been amended to recite "to generate a plurality of temporally equidistant points" and "normalizing the signature trace to an arc length of 1 and the total time to produce the signature to 1". Geiger fails to at least disclose these recitations, as Geiger uses a different normalization process and for a different purpose.

As disclosed by Geiger, to smooth the signature trace lines, the signature trace of Geiger is normalized. "As known to those having ordinary skill...a smoothing procedure is the technique used to suppress...noise...." (Geiger: paragraph [0060], describing the normalization technique). "The normalization procedure may include noise suppression and regulatization of the input data's variability...." (Geiger: paragraph [0051]). Further, as best understood, Geiger fails to disclose: normalization of the signature trace to an arc length of 1; normalization the total time to produce the signature to 1; and temporally equidistant points.

For at least these reasons, the Applicants assert that Plamondon, Geiger and Hu, either alone or in combination, at least fail to disclose or suggest all recitations of claim 1. The Applicants request reconsideration and withdrawal of the rejection to claim 1 under § 103.

Independent claims 17, 33, 38, 43, 48 and 55

For at least the reason discussed above with regards to claim 1, Plamondon, Geiger and Hu also fail to disclose or suggest all recitations for claims 17, 33, 38, 43, 48 and 55. The Applicants request reconsideration and withdrawal of the rejections to claims 17, 33, 38, 43, 48 and 55 under § 103.

Dependent claims 12 and 28

The Office has rejected claims 12 and 28 as allegedly being unpatentable over Plamondon in view of Geiger in view of Hu in further view of Moussa. For at least the

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reason of their dependence upon an allowable base claim, it follows that claims 12 and 28 are

also allowable. Further, Moussa fails to disclose the neural network of claims 12 and 28.

The neural network of Moussa is used to store the features of the template signature. (Moussa: col. 1, lines 43-58). As recited in claims 12 and 28, "comparing the angle an distance data incorporates at least one neural network for determining the verification criteria..." Claims 12 and 28 have been amended, without disclaimer or prejudice, to include the recitation of "by providing a comparison output to the verification means" to clarify the neural network.

For at least the above reasons, the Applicants assert that Plamondon, Geiger, Hu and Moussa, either alone or in combination, fails to disclose or suggest the recitations of claims 12 and 28. The Applicants request reconsideration and withdrawal of the rejections to claims 12 and 28 under § 103.

Independent claims 2-11, 13-16, 18-27, 29-32, 34-37, 39-42, 44-47, and 49-55

For at least the reason of their dependence upon an allowable base claim, it follows that claims 2-11, 13-16, 18-27, 29-32, 34-37, 39-42, 44-47, and 49-55 are also allowable. The Applicants request reconsideration and withdrawal of the rejections to claims 2-11, 13-16, 18-27, 29-32, 34-37, 39-42, 44-47, and 49-55 under § 103.

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CONCLUSION

By the remarks and the amendments provided herein, the Applicant respectfully

submits that the Office Action mailed June 11, 2009 has been traversed and that the

application is in condition for allowance. If the Examiner has any concerns regarding the

response provided herein, or wishes to discuss the response further, the Examiner is invited to

contact the undersigned attorney.

The Commissioner is hereby authorized to charge any deficiency or credit any

overpayment of the fees associated with this communication to Deposit Account No. 23-

3050.

Date: August 14, 2009

/Robert A. Madayag/

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